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THE UNIVERSITY OF ALBERTA

THE INFLUENCE OF SOCIAL SUPPORT ON PARENT, FAMILY AND CHILD FUNCTIONING

BY

MARY SULLIVAN HOLDGRAFER

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF EDUCATION.

DEPARTMENT OF ELEMENTARY EDUCATION

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SPRING, 1988

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The Influence of Social Support on Parent, Family and Child Functioning

submitted by Mary Sullivan Hodgrafer

in partial fulfillment of the requirements for the degree of Master of Education

Supervisor

Date: April 22, 1988

This work is dedicated to the families
and staff of the Alberta Early
Intervention Programs

ABSTRACT

The influence of informal and formal social support on personal time demands, personal well-being, and family integrity among 90 Alberta mothers and 58 North Carolina mothers of handicapped or at-risk young children was examined. Parents completed a series of questionnaires about their social support networks and personal, family, and child functioning. Differences were found in the sources and types of support in the two samples with North Carolina mothers using more informal social support and Alberta mothers using more formal support. Informal and formal social support were found to influence the adjustment to the rearing of a handicapped child. Differences in the sources and types of social support available to the two samples resulted in differences in the effect of social support on personal time demands, personal well-being, and family integrity. The results were generally as predicted. Data from 37 Alberta couples was examined to determine if there were differences in the sources and types of support among mothers and fathers. There was no significant differences in the types of support used by the two groups and only two differences were found for the sources of support available to mothers and fathers. The results are discussed in terms of the implications for future research, program operation, staff training, and government policy.

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CHAPTER I

INTRODUCTION

Early intervention is a unique type of service for infants at-risk for developmental delay due to environmental or biological factors. It is aimed at eliminating or ameliorating existing or anticipated deficits in specific populations of young children (Bricker, Bailey, & Bruder, 1984; Dunst, 1985). This form of service has traditionally been child-focused. That is, the handicapped or at-risk child has been the recipient of the intervention service. Successful Early Intervention Programs have acknowledged the need to work at the home environment and to include some form of parent involvement (Filler, 1983). Most often parents have been trained to act as teachers of their young children. Farber & Lewis (1975), however, suggest that this approach might be harmful as it places undue emphasis on teaching and pressure on parents to perform as professionals.

An alternative model for conceptualizing and implementing early intervention services has been described by Dunst (1985). In his family-focused model, he proposed a new definition of early intervention based on social systems theory. According to Dunst, early intervention can be defined as:

> the provision of support to families of infants and young children from members of formal and informal social support networks that impact both directly and indirectly upon parental, family, and child functioning. (p. 179)

The form of intervention derived from this definition is more comprehensive than the traditional child-focused approach. It is based on an ecological view of child development where the child is

seen as a part of a larger family unit (Bronfenbrenner, 1979). According to Bronfenbrenner's view, the family unit is embedded in broader ecological systems (e.g., relatives, friends, neighbors) which are further embedded in larger social units (e.g., neighborhood, workplace, church). Finally, these formal and informal social units are embedded in larger social systems which have decision-making powers (e.g., school boards, governments). According to Dunst (1985), a fundamental tenet of ecological psychology is that "social units and their members do not act in isolation, but rather interact both within and between levels so that events occurring indifferent units or subunits reverberate and impact upon the behavior of member in other units" (p. 172).

According to this perspective, stress on the family unit can reduce the family members' ability to attend to child needs. For example, job loss, illness, or separation may diminish parents' ability to deal effectively with routine child care demands, as well as special needs of a handicapped child. Similarly, the child can be seen to have a direct and potentially stressful impact on the family as in the birth or diagnosis of a handicapped child (Foster, Berger, & McLean, 1981).

The major aim of family-focused intervention is to strengthen families. This can be accomplished through the provision and mediation of support by both formal (e.g., Early Intervention Programs, social service agencies) and informal (e.g., relatives, friends, neighbors) social support networks (Dunst, 1985).

Social support is defined by Cohen & Syme (1985, p. 4) as "the resources provided by other persons." It differs in type and

function at different periods of life. Social support includes the emotional, physical, informational, instrumental, and material assistance which is necessary to maintain health and well-being, to promote adaptation to life events, and to foster the development of the family (Dunst, 1985).

The efficacy of various experimental, educational, and therapeutic approaches to early intervention has usually been evaluated in terms of child progress (e.g., developmental or functional assessment) or other measures of child change (e.g., health status) (Bricker et al., 1984; Dunst, 1985; Dunst, Snyder, & Mankinen, 1985, in press). In the case of family-focused intervention, however, evaluation could include both child and family outcome measures. Broad-based measures of program effectiveness might include personal (parent) well-being and coping, family integrity, parental attitudes and aspirations for self and child, parent self-concept and locus-of-control, and dimensions of parent-child interactions, as well as child behavior and development (Dunst, 1985).

Alberta Early Intervention

Early Intervention Programs began to appear in the United States in the 1960s (Dunst, 1985; Linder, 1983) and in Alberta by the early- to mid-1970s (Early Intervention Standing Program Committee, 1985; Holdgrafer, 1985). Currently in Alberta there are 14 Early Intervention Programs which are funded by Alberta Community and Occupational Health. These programs operate primarily as a part of the health unit system; however, three of the programs are administered by private associations, and two by school districts.

According to the Early Intervention Standing Program Committee (1985), the purpose of early intervention in Alberta is:

> to strengthen the family's ability to optimize the child's development. (This) means EIP (Early Intervention Program) workers may carry out these functions in a different manner than some other professionals. EIP workers work in collaboration with parents.... The EIP worker(s)...work to help parents understand the child's developmental delay, work with the parents to help them learn the components of an appropriate program, increase the parents' skills in using the resources of other agencies, (and) assist parents to know how to evaluate their child's program. (p. 45)

The intent of these programs is to provide services to young (0-3 1/2 years), developmentally delayed children and their families. Services are home-based, although there may be center-based components. The delivery of early intervention services may vary from one system or agency to another, however, the intent remains the same across the province. The role of the early intervention worker is specified and the duties delineated (Early Intervention Standing Program Committee, 1985). The program is proactive in that it seeks "to increase the family's ability to adapt and respond to the child in a positive, supportive manner, and to optimize their child's development" (Early Intervention Standing Program Committee, 1985, p. 44). However, it does not specifically address the influence of social support on the functioning of the family and its members.

Family, Infant and Preschool Program

In contrast, the Family, Infant, and Preschool Program (FIPP) at Western Carolina Center, Morganton, NC, is explicitly family-focused in its approach. The program which serves a four-county area in western North Carolina lists as its major programmatic goal the "proactive empowerment of families through partnerships" (Dunst,

1985, p. 181). This goal is accomplished by imparting information, knowledge, skills, and competencies which positively influences child, parent, and family functioning. The provision and mediation of social support is specifically acknowledged as the primary means of strengthening families.

The program is organized into two segments, Comprehensive Services and Special Projects. Comprehensive Services include transdisciplinary teams of professionals from the disciplines of psychology, speech pathology, social work, special education, nursing, occupational therapy, physical therapy and pediatrics. The teams provide assessment and planning, in-home family services, parent-child support groups, and mediation of support (Dunst, 1985).

In addition, the Comprehensive Services component includes Community Resource Services which provides activities related to public awareness, dissemination, technical assistance, and follow-up services for families. Research and Evaluation Services constitute the final component of the Comprehensive Services. Its major function is to evaluate the extent to which the direct service component is implemented as planned and has the intended effects.

The FIPP Special Projects component includes a variety of direct service programs which may be accessed in addition to the transdisciplinary intervention services, research laboratories, and staff training services. Among the more unique services are a program to facilitate the exchange of goods and services, a parent-to-parent support program designed to establish linkages among families who share common concerns about rearing a handicapped child, and an in-home respite program aimed at reducing the demands of

raising a handicapped child by providing specialized child-care support. Current research projects include a meta-analysis of early intervention and a prospective study of the effects of social support on families of handicapped infants.

Definitions

For the purposes of this study the following definitions will be used:

1. Early intervention is a set of programs in which professional staff work in collaboration with parents to optimize their handicapped or at-risk infant's development.

2. Social support is a construct which includes emotional, physical, instrumental, informational, and material resources provided by other persons. It may differ in type and function at different periods of life and its purpose is to maintain health and well-being, promote adaptation to life events, and foster development (Cohen & Syme, 1985; Dunst, 1985).

3. Social systems theory postulates that "events in different social units do not operate in isolation but affect one another both directly and indirectly so that changes in one unit or subunit reverberate and impact upon other units" (Trivette & Dunst, 1985).

4. Social network is a set of relationships in which there is a flow of resources from one member to another. Relationships may vary in terms of quantity, quality, and symmetry (Hall & Wellman, 1985).

Purpose and Scope

The purpose of this study was to compare the influence of social support on parent, family, and child functioning among a sample of North Carolina mothers with handicapped young children and a sample

of Alberta mothers of handicapped young children. The circumstances varied for these two populations based on demographic factors (e.g., length of residence, income, SES, type of health insurance).

The independent variables for the study included parental characteristics (age, education level, locus of control, marital status, employment status), family characteristics (SES, income, occurrence and impact of financial events), informal and formal social support, and child characteristics (age, IQ). The dependent variables included measures of personal time demands, parental well-being, and family integrity.

Delimitations

There were two types of delimitations imposed on the study: sample and methodological. The sample was delimited in two ways.

First, the children were limited to those who were enrolled in either Alberta early intervention or FIPP in North Carolina. Their ages were limited to 0-60 months. Although in Alberta the programs are intended to serve children from 0-3 1/2 years, there is some flexibility to accommodate youngsters who have not been placed in a suitable preschool program. FIPP serves children until they are established in public school programs (up to age 8). The older children were excluded from this particular school.

The second sample delimitation involved parents. Because the FIPP sample did not include sufficient fathers as respondents, the comparison between populations was limited to mothers only. A post hoc descriptive comparison of sources and types of social support available in Alberta couples was also included.

Because the current study was a replication of work conducted by Dunst and his colleagues, the methodology was determined by them. Survey questionnaires were the primary source of data. The child assessment used in Alberta was selected because it was judged to be compatible with assessments used at FIPP and all Alberta early intervention workers had the skill to administer the instrument.

Objectives

The study specifically involved the following objectives:

1. To compare the Alberta sample with the North Carolina sample to determine if the two groups were similar or different in their sources and types of support.
2. To determine whether or not social support is related to the dependent measures in a similar or different way in the two samples.

Hypotheses

1. It is predicted that there are differences in the sources and types of informal and formal social support available to Alberta mothers and North Carolina mothers.
2. Adjustment to the rearing of a handicapped or at-risk child is influenced by the various types of formal and informal social support provided by others.
3. Because of the differences in the type of support available, there will be differences in the effect of support on personal time demands, personal well-being, and family integrity (the dependent measures).

CHAPTER II

LITERATURE REVIEW

There is a large and rapidly expanding body of literature that attempts to define social support and describe its effects on physical and mental health (Barrera & Ainley, 1983; Cohen & Syme, 1985; Hall & Wellman, 1985; House & Kahn, 1985; McCubin, Joy, Cauble, Comeau, Patterson, & Needle, 1980; Mitchell & Trickett, 1980; Sandler & Barrera, 1984). The social support construct has been difficult to conceptually and operationally define (Dunst, 1986; Thoits, 1982). There is, however, agreement that the construct is multidimensional (Barrera & Ainley, 1983; McCubbin et al., 1980; Mitchell & Trickett, 1980; Sandler & Barrera, 1984; Stokes & Wilson, 1984) and that different types of support have differential impacts (Mitchell & Trickett, 1980).

According to Cohen & Syme (1985) it is necessary to be able "to conceptualize and assess the kinds of support being provided before it will be possible to understand the support process and realize the clinical possibilities" (p. 13). The term social support refers to a number of different aspects of social relationships (House & Khan, 1985). It has been defined in terms of the number and types of relationships, the structure of relationships, the functional content (House & Kahn, 1985), satisfaction with support (Barrera, 1981), and seeking and receiving support for self-identified needs (Dunst, 1986). There are a number of potential connections between and among the various components of the social support construct (Dunst, 1986; Hall & Wellman, 1985; House & Khan, 1985).

Social Support in Families of Normally-Developing Children

Recently social support research has begun to focus specifically on issues related to parent, family, and child functioning (Crnic, Greenberg, & Slough, 1986). Within families of normally-developing children, the influence of parents' personal social networks on parenting and subsequent child development has been presented (Bronfenbrenner & Crouter, 1983; Cochran & Brassard, 1979; Powell, 1979). It has been suggested that social networks have an effect on parenting attitudes and behaviors, which, in turn, both directly and indirectly influence child development.

Belsky (1984) stated that personal psychological resources of parents, characteristics of the child, and contextual sources of stress and support constitute the determinants of family functioning. He presented a model which presumed that family functioning was multiply determined. Sources of stress and support affect parenting both directly and indirectly by influencing personal well-being.

Crockenberg (1980) demonstrated a relationship between maternal social support and infant development. She investigated the influence of infant irritability, maternal responsiveness, and social support on the development of secure mother-infant attachment at 12 months. Results indicated that social support was the best predictor of secure attachment, and it was most important for mothers of irritable babies. In a follow-up study, Crockenberg and McCluskey (1986) found that the presence of social support contributed positively to changes in maternal behavior during the first 12 months.

Social Support in Families of Handicapped Children

Interest in the functioning of families of handicapped children has increased dramatically in recent years. In the United States family support has been designated as a funding priority for research programs (Wikler, 1986). However, to date a relatively small proportion of the literature has addressed the effects of social support on parent and family functioning in the case of a handicapped child. Nonetheless, the available studies suggest that social support has a powerful influence on parental and family functioning (Crnic, Friedrich, & Greenberg, 1983; Dunst, 1985, 1986). Families with adequate support systems remain more functional overall and they are better at facilitating child development (Crnic et al., 1986). It is likely that social support is both influenced by the birth of the handicapped child and influences the family's reaction and adaptation (Crnic et al., 1986; Dunst, 1986). This transactional view of support suggests that the ecological contexts and the individual's ongoing interactions with them may be more predictive of developmental outcome than the presence of some specific risk factors (Sameroff & Chandler, 1975).

Problems with Current Research

Some of the literature suggests that families of handicapped and retarded children have less support available to them than families of normally-developing children (Embry, 1980; Friedrich & Friedrich, 1981; Gabel & Kotsch, 1981; Kazak & Marvin, 1984; Kazak & Wilcox, 1984; McDowell & Gabel, 1979). It is believed that families either withdrew from their social support networks, or the network members withdrew from the families, or both (Blackard & Barsh, 1982; McDowell

& Gabel, 1979). It is presumed that the lack of support is a factor which negatively affects both personal and family well-being.

While the above view is substantiated by research evidence, there are a number of problems with the existing research which call into question some of the findings from studies of social support in families of handicapped children (Dunst, 1986). According to Dunst (1986), some of the major problems include the following:

1. Most of the information about social support in families with handicapped children is derived from retrospective data.

2. Clinical rather than representative samples are most frequently used to describe these families.

3. These clinical samples are often matched with families of normally-developing children in order to establish that there are differences between the two groups and that the differences are attributable to the presence of a handicapped child in the family.

4. Studies of family reactions to the birth and rearing of a handicapped child have generally failed to consider that the birth of any child is an event that significantly affects parental and family behavior.

5. Comparative studies have generally failed to take into account the factors that influence adaptations to the birth and rearing of a handicapped child. For example, parental coping abilities, family functioning, and social support.

6. To date, no studies have simultaneously examined the effects the birth of a handicapped child has on the family's social support system and the role social support plays in affecting the family adaptations to this event.

Taken together the above points suggest that this view of the adaptability and functioning of families of handicapped young children may underestimate their actual performance. Similarly, Crnic et al. (1983), pointed out that investigators have tended to focus on the concept of "anticapated pathology" (p. 126) in families. Prospective studies and longitudinal examination of the role that social support plays in buffering negative reactions and promoting positive functioning in response to the birth and rearing of a handicapped child have also been recommended (Dunst, 1986; Turnbull, Summers, & Brotherson, 1986).

Conceptual Framework

During the past six years Dunst and his colleagues have conducted a series of studies on the influence of social support on parent, family, and child functioning. A "social systems model" (Dunst, 1985, p. 176) of parent, family, and child functioning has evolved from their research. According to Dunst (1985, 1986), the model was developed from research designed to test hypotheses central to social network theory (Caplan, 1974; Mitchell & Trickett, 1980; Wellman, 1983), social support theory (Broadhead et al., 1983; Cohen & Syme, 1985; Gottleib, 1981, 1985), family systems theory (Minuchin, 1985), family life-cycle theory (Benson & Turnbull, 1986; Hill, 1964; Turnbull et al., 1986), help-seeking theory (DePaulo, Nadler, & Fisher, 1983; Gourash, 1978), human ecology (Bronfenbrenner, 1979; Cochran & Brassard, 1979; Garbarino, 1982), life-span developmental psychology (Baltes, Reese, & Nesselroade, 1977), a transactional model of development (Sameroff & Chandler, 1975), and adaptational model of stress and coping (Crnic et al., 1983).

Briefly, each of these models and theories is described below:

Social Network Theory

Social network theory stresses the importance of social support as a mediator of personal and familial well-being and coping. It attempts to describe the properties of social units, the linkages among the units, and the process by which social support from members of different social units contribute to the well-being of others (Mitchell & Trickett, 1980).

Social Support Theory

Social support theory emphasizes the manner in which various types of help, assistance, and resources promote positive functioning and buffer individuals form the negative consequences of stress-producing life events (Cohen & Syme, 1985).

Family Systems Theory

Family system theory attempts to examine roles, characteristics, and interconnections among family members as a means to explain individual and family adaptations to events which affect the family unit (Berger & Foster, 1986; Fine, 1985).

Family Life-cycle Theory

This theory focuses on the growth and adaptation of families in response to normative and non-normative life events such as the birth of a child, divorce, or death and how the reactions to these events are influenced by intrafamily and extrafamily support (McCubbin & Figley, 1983).

Help-seeking Theory

Help-seeking theory examines those factors that influence decisions to seek help and the conditions which influence responsiveness to help (DePaulo et al., 1983; Gourash, 1978).

Human Ecology

Ecological psychology emphasizes the interdependencies among different social networks, and how the provision (or disruption) of support in one social unit reverberates and affects the behavior of members in other units (Bronfenbrenner, 1979).

Life-span Developmental Psychology

Life span developmental psychology attempts to describe and explain personal change in behavior and interpersonal differences in such changes across the life span (Baltes, et al., 1977).

Transactional Model of Development

This model of development seeks to understand how child, parent, family, and environmental factors affect and are affected by one another in a manner that explains both positive and negative outcomes in children and their families (Sameroff & Chandler, 1975).

Adaptational Model of Stress and Coping

This model of adaptation focuses on how ecological influences, including social support, affect the families' reactions and adaptations to the birth and rearing of a handicapped child (Crnic et al., 1983).

Taken together, these models and theories indicate the complexity of parent, family, and child functioning. There is little doubt that social support is one factor that affects parent, family, and child functioning; however, it is by no means the only factor. For

example, particular parent, family, and child characteristics; sources of support (intrafamily, informal, and formal); and exosystem influences (Bronfenbrenner, 1979; Garbarino, 1982) are likely to affect family development and functioning. clearly social units and events within them do no operate in isolation but affect one another both directly and indirectly (Dunst, 1986).

Research Findings

In the series of studies conducted by Dunst, it was found that different forms of support available to families of handicapped young children did influence parent, family, and child functioning (Dunst, 1985, 1986; Dunst, Trivette, & Cross, 1986a, 1986b; Trivette & Dunst, in press). The following findings have consistently emerged:

1. Social support was generally related to parent, family, and child outcomes.
2. Qualitative rather than quantitive dimensions of support were the most important mediators of family functioning.
3. Personal well-being was generally related to intra- and extra-family informal support, but not to formal support.
4. Family integrity was most related to the provision of intra-family and informal support.
5. Parental attitudes toward the handicapped child were most related to extra-family support, while parental over commitment and over protection were most related to intra-family support.
6. Parental perceptions of child functioning were most related to extra-family support.
7. Actual developmental progress by the children was generally unrelated to any type of support (Dunst, 1985, 1986).

Two additional studies have extended and elaborated upon the initial work. In the first study, a temporal model was used for ordering the sequence of events thought to influence parent and family reactions to the birth and rearing of a handicapped child. In it the independent variables (family characteristics, social support, child characteristics, and child diagnosis) were temporally ordered to reflect the presumed existence of an informal support network prior to the birth of the child. Results of the study indicated that personal well-being, family integration, and parental perceptions of child functioning were positively influenced by the helpfulness of the family's informal social support network (Dunst, 1986).

The second study employed a model to ascertain the influence of social support as a mediating construct. In this instance, the independent variables were parent characteristics, child characteristics, and child diagnosis. The dependent measures were several different scales of stress and well-being. Results indicated that social support was the single most important mediating variable (Dunst, 1986).

Summary

Taken together, the results from the studies presented here provide strong evidence of the value of a social systems perspective of parent, family, and child functioning. Much work remains to be done before the complexity of the social support construct can be fully understood. The social systems model provides a means to begin to disentangle the complexities of parent and family functioning and assess the various characteristics which promote positive functioning

and buffer a family from negative reactions associated with the birth and rearing of a handicapped child.

CHAPTER III

METHODOLOGY

This study was designed to compare a sample of Alberta mothers of handicapped infants and preschoolers with a North Carolina sample to determine if the two groups differed in their sources and types of support, and to determine how social support was related to parent time demands, personal well-being, and family functioning in the two samples. In a post hoc analysis, Alberta mothers and fathers were also compared to determine if husbands and wives differed in their sources and types of support.

Dependent variables for the two comparisons were measured of time demands related to child care and adult activities, general and child-related physical and emotional well-being, and family integrity. The measures were derived from three instruments: the Personal Time Commitment Scale (Dunst & Trivette, 1985), the Personal Well-Being Index (Trivette & Dunst, 1985), and the Family Inventory of Resources and Management (McCubbin, Comeau, & Harkins, 1981).

Independent variables were respondent age, socio-economic status (SES), income, locus of control, marital status, employment status, length of community residence, adequacy of health insurance, occurrence and impact of financial events, perceived need for social support, age of handicapped or at-risk child, and child Intelligence Quotient (IQ). The independent measures were derived from the Perception of Control Scale (Trivette & Dunst, 1985), the Financial Impact Survey (Holdgrafer, Trivette, & Dunst, 1986), the Inventory of Social Support (Trivette & Dunst, 1985; Trivette, Dunst, &

Holdgrafer, 1986), the Support Functions Scale (Dunst & Trivette, 1985), demographic information, and a child assessment. The procedures, instruments, and data analysis are described in this chapter.

Subjects

Alberta Mothers

Subjects from the Alberta sample were randomly selected from 13 of the 14 Early Intervention Programs which are funded by Alberta Community and Occupational Health. These included programs from both rural and urban areas. One program did not participate in the study because of staff illness.

Ninety mothers of children currently enrolled in Early Intervention Programs participated in the study. The subjects were parents of mentally retarded, physically handicapped, and developmentally at-risk youngsters from 2 to 58 months of age. The mean age of the mothers was 31 with a range of 21 to 49. They had completed an average of 12.3 years of schooling with a range from 2 to 19 years. Their mean socio-economic status score (Hollingshead, 1975) was 35.67, which indicated that the majority of the families were from middle SES (middle range is 27-48) backgrounds. The average gross monthly family income was $1,895. The mean family size was 4.02 with a range of 2 to 9 members. Eighty-three percent of the respondents were married, while the remaining 17 percent were single, separated or divorced. Thirty-six percent of the mothers worked outside the home either full or part time. The average length of community residence was 12.7 years. One hundred percent reported

having health insurance, while 92.1 percent indicated that their insurance was adequate to meet the needs of their family.

The average chronological age of their handicapped or at-risk child was 23.7 months. The average mental age was 14.6 months and the children's average IQ was 58. Fifty-five percent of the children were males. The most frequently reported primary handicap was chromosomal (e.g., Down Syndrome).

North Carolina Mothers

Participants were mothers of children enrolled in FIPP (the Family, Infant, and Preschool Program) at the Western Carolina Center, Morganton, NC. The program serves families from a four-county area made up of small communities. Fifty-eight mothers were selected for inclusion in the study from a total sample of 74. Selection was based on the age of the identified handicapped or at-risk child which corresponded with the ages of children in the Alberta sample. The North Carolina mothers who were excluded from the sample had a handicapped or at-risk child who exceeded the age of 60 months. The subjects were mothers of mentally retarded, physically handicapped, and developmentally at-risk youngsters from 5 to 60 months of age. The mean age of the mothers was 29.5 years with a range of 17 to 55. The mean number of years of school completed by the mothers was 12 with a range of 0 to 18 years. Their mean socio-economic status score (Hollingshead, 1975) was 32.96, indicating that the majority of the families were from middle SES backgrounds. The average gross monthly family income was $1,386. The mean family size was 3.9 with a range of 2 to 6 members. Eighty-three percent of the subjects were married, while the

remaining 17 percent were single, separated, or divorced. Forty-two percent of the women worked outside the home either full or part time. The average length of community residence was 16.88 years. Eighty-six percent reported having health insurance and 68.3 percent indicated that their health insurance was adequate to meet their family's needs.

The average chronological age for the children was 31 months. Their average IQ was 54. Sixty-one percent of the children were males. The most frequently reported primary handicap was physical (e.g., cerebral palsy).

Alberta Mothers and Fathers Samples

From a total sample of 90 mothers and 50 fathers, subsamples of mothers and fathers which constituted 37 couples were compared. The mean ages were 30.8 years for mothers and 32.2 years for fathers. the mean number of years of schooling completed by mothers was 12.6 and fathers was 13.1. Their mean socio-economic status score (Hollingshead, 1975) was 37.5, indicating that the majority of the families were from middle SES backgrounds. The average gross monthly family income was $1,978. Forty percent of the mothers worked outside of the home either full or part time. Eighty-nine percent of the fathers were employed, while only 5 percent reported being unemployed. The average length of community residence was 11.8 years for mothers and 16.3 years for fathers. One hundred percent of the families reported having health insurance and 92 percent indicated that the insurance was adequate to meet their family's needs.

The mean chronological age of their handicapped or at-risk child was 23.5 months, while the average mental age was 14.4 months. The

children's average IQ was 57. Fifty-four percent of the youngsters were males. The most frequently reported primary handicap was chromosomal (e.g., Down Syndrome).

Procedures

The North Carolina data were gathered as a part of an on-going study of the relationships between social support and parent, family, and child functioning. During the past six years, Dunst and his colleagues have conducted a series of studies which have been reported in aggregate form (Dunst, 1985, 1986; Dunst & Trivette, 1987, in press) and individually (Dunst, 1985; Dunst, McWilliam, Trivette, & Galant, 1986, in press; Dunst & Trivette, 1986; Dunst, Trivette, & Cross, 1986a, 1986b; Trivette & Dunst, 1986). Data were gathered at the time of initial planning or the annual review of child and family program goals, from families involved in the direct service component of the FIPP. The parents were asked to complete a series of questionnaires and child developmental assessments were completed by staff members. Data from the current North Carolina study were made available to the researcher for comparison with the Alberta sample of mothers.

The Alberta data were gathered during the months of February and March, 1987, specifically for the purposes of this study. The following steps were taken to obtain the Alberta sample:

1. Supervisors of the 14 Early Intervention Programs funded by Alberta Community and Occupational Health were contacted and asked if they would participate in the study. After obtaining their permission, program operators (e.g., Medical Officer of Health) were contacted and formal permission to conduct the study was obtained.

2. Early intervention staff were instructed to randomly contact mothers and fathers to determine if they were willing to participate in the study. They were asked to continue contacting parents until they had filled their quota of subjects which was based on a ratio of enrollments.

3. The early intervention workers distributed survey forms along with an introductory cover letter and consent form to all participants (see Appendix A for copies of the letter and consent form). They provided assistance with reading the forms where necessary.

4. Completed questionnaires were subsequently picked up by the early intervention workers. They then arranged for the completion of the child assessment and a one-page child information form. When all of the information was complete, it was returned to the researcher by the early intervention staff.

Instruments

Seven questionnaires were completed by all the subjects. They were: the Inventory of Social Support (Trivette & Dunst, 1985; Trivette, et al., 1986), the Support Functions Scale (Dunst & Trivette, 1985), the Perception of Control Scale (Trivette & Dunst, 1985), the Financial Impact Survey (Holdgrafer, et al., 1986), the Perception of Well-Being Scale (Trivette & Dunst, 1985), the Personal Time Commitment Scale (Dunst & Trivette, 1985), and the Family Inventory of Resources and Management (McCubbin, Comeau, & Harkins, 1981). In addition demographic and child developmental assessment information was gathered. the child assessment instruments used in North Carolina were the Bayley Scales of Infant Development (Bayley,

1969) and the Abilities of Babies (Griffiths, 1954). For the Alberta sample, the Child Development Rating Scale (CDRS) (Weeldryer, Dunst, Snyder, Chase, Cooper, & Carswell, 1986) was used as the child developmental assessment measure. The following is a brief description of the instruments (see Appendix B for copies of the instruments).

Demographic Information

Demographic data were derived primarily from the Background Information Sheet. Measures of parent and family characteristics included mother's and father's ages, gross monthly family income, socio-economic status scores based on mother's and/or father's education level and occupation (Hollingshead, 1975), length of community residence, and presence and adequacy of health insurance.

Child information was gathered from the Background Information Sheet completed by parents and a Child Information Sheet completed by Alberta early intervention staff, or in the case of the North Carolina sample, from case files. The information included age in months and diagnosis.

Child Development Rating Scale

Child mental age and Developmental Quotients (DQ) were derived from the Child Development Rating Scale (CDRS) (Weeldryer, et al., 1986). The CDRS was adapted from the Wisconsin Behavior Rating Scales (Song & Jones, 1980) and the Vineland Adaptive Behavior Rating Scales (Sparrow, Balla, & Cicchetti, 1984). It was designed to assess children's capabilities in four areas: communication, daily living, socialization, and movement. The scales are to be completed by a person who is intimately familiar with the child. In this case

the assessments were completed jointly by the early intervention worker and the parent (usually the mother).

Sources and Types of Social Support

One of the measures of social support included in this study was the Inventory of Social Support (Trivette & Dunst, 1985; Trivette, et al., 1986). The scale was used to measure the number of persons, groups, and agencies in the respondent's informal and formal social network and the number per category who provided different types of support. Nineteen sources of support and 12 types of support are organized in a matrix format. The higher the score on this scale the greater the sources and types of support. The scale has been used in a number of studies examining various aspects of a respondent's personal social network.

Reliability and validity of this scale were established in a study of 121 parents of handicapped preschool children (Dunst, Trivette, 1986). coefficient, alpha computed for the average correlation among the items was 0.87. The split-half reliability (even vs. odd number items) was 0.88 corrected for length using the Spearman-Brown formula. Short term test-retest reliability was established using 25 of the parents who completed the scale on two different occasions, one month apart. The average test-retest correlation for the individual items was 0.91 (sd = .18, $p < .01$). The stability coefficient for the total scale score was 0.62 ($p < .01$).

Dunst & Trivette (1986) examined the criterion validity of the Inventory of Social Support in relation to measures of personal and family well-being and time demands. They found that personal and

family well-being were positively related to adequacy of support and that greater need for support placed increased time demands on the respondent. Financial support was found to be significantly related to family well-being; however, emotional, child-related, and instrumental support were significantly related to personal well-being. Time demands were unrelated to the types of support measured by this scale.

Perceived Need for Support

The second measure of social support, the Support Functions Scale (Dunst & Trivette, 1985), was designed to measure the respondent's perceived need for 12 types of help and assistance. The types of assistance measured by the scale include material (e.g., someone to provide transportation), emotional (e.g., someone to talk with), informational (e.g., someone to answer child rearing questions), and instrumental (e.g., someone to help with child care). The higher the score on this scale the greater the need for support.

In a study of 121 parents of preschool handicapped children (Dunst & Trivette, 1986), the correlation alpha computed on the average correlation among the scale items was 0.98. The test-retest reliability coefficient for the total scale score was 0.62 for the scale administered two months apart.

Locus of Control

The Perception of Control Scale (Trivette & Dunst, 1985) was designed to measure the respondent's feeling of control. The 16-item scale is composed of four subscales: ability, effort, luck, and context. The higher the score on this scale the lower the perception of control.

Test-retest reliability for this scale was established by Dunst and Trivette (1986) using 28 subjects. The coefficient alpha for the total scale score was 0.96. Validity was established for the scale by examining it's relationship to SES, income, personal well-being, and family integrity.

Financial Events

The Financial Impact Survey (Holdgrafer, et al., 1986) was designed to measure the occurrence and impact of life events which could potentially alter the family's financial status. The respondent was asked to indicate those events which have occurred "since the birth of your child" and "in the last six months," and to indicate the extent to which the event was viewed as having either a positive or negative effect on family's financial situation at the time the event occurred. The higher the scores on this scale the greater number of occurrences and the greater the impact of these events.

The short term test-retest reliability of the instrument at one month apart was established with 32 subjects (Dunst & Trivette, 1987). The coefficient alpha was 0.89 ($p \leq .001$) for the total number of occurrences and 0.85 ($p < .001$) for the total rating of events. Validity was examined for the relationship of the total number of occurrences and the total rating of events with personal well-being and family integrity.

Time Demands

The Personal Time Commitment Scale (Dunst & Trivette, 1985) was designed to measure the extent to which the respondent had adequate time for performance of child-related duties and adult activities.

it yields a global measure of time demands, as well as subscale scores for time demands related to child care and general life events. The higher the score on the adult scale the more time available for personal pursuits; on the child-related subscale the higher the score the less the time demands.

The reliability and validity of the scale were established in a study of 86 mothers and fathers of preschool handicapped children (Dunst & Trivette, 1986). Twenty-five subjects completed the scale on two occasions, one month apart, to determine the short term test-retest reliability. The reliability coefficient for the total scale score was 0.78 ($p < .001$). The criterion validity was examined in terms of covariation between the two subscale scores, the total score, and parent, family and child characteristics. Child measures (age, mental age, and IQ) were generally unrelated to any of the time commitment measures. Maternal age and paternal education level were both significantly related to adult time demands and the total scale scores. Neither SES nor family income were related to time demands. Social support was generally unrelated to time demands. All of the time commitment measures were significantly related to personal well-being and family integrity in a negative direction.

Well-Being

The Personal Well-Being Index (Trivette & Dunst, 1985) was used to measure physical and emotional health. The scale yields a total well-being score based on the respondent's assessment of feelings of strain, depression, physical energy level, etc. It also rates specific components of well-being, including general emotional, general physical, child-related emotional, and child-related

physical. The higher the score on this scale the greater the well-being.

The coefficient alpha, computed from the average correlation among the 16 items in a study of 86 parents of preschool handicapped youngsters, was 0.89 (Trivette & Dunst, 1986). Criterion validity of the scale was examined in terms of covariation between the scale scores and a number of parent, family and child characteristics. It was significantly related to both mothers' and fathers' ages, SES, income, family integrity, and social support. Well-being was also found to be influenced by social support.

Family Functioning

The degree to which different family members function in a cooperative, cohesive manner was measured by the Family Inventory of Resources and Management (McCubbin, Comeau, & Harkins, 1981). The questionnaire contains 20 statements about situations which may occur in a family. The respondent is asked to rate the family's current situation based on the statements. This instrument has been widely used in research and clinical settings. On this scale the higher the score the poorer the family integrity.

Initial tests of reliability and validity were conducted on a longer version (98 items) of the scale. Three hundred and twenty-two families with a "chronically ill" child (myelomeningocele and cerebral palsy) completed the form and factor analytic procedures were used on the data to determine the underlying dimensions (McCubbin, Comeau, & Harkins, 1981). four scales representing perceived family resources emerged. They included esteem and communication, mastery and health, extended family social support,

and financial well-being. The internal reliability for these four scales was 0.89 (Chronback's alpha).

Methods of Analysis

The data were analyzed to answer each of the three hypotheses of this study. In addition, comparative analyses of the Alberta and North Carolina mother data were conducted to further describe the samples. Finally, a post hoc comparative analysis of Alberta mother and father data was conducted.

Hypothesis 1

The first hypothesis stated that it is predicted that there are differences in the sources and types of informal and formal social support available to the Alberta mothers and the North Carolina mothers.

In order to determine if differences exist between the two samples, the t-test was computed for the means of the Alberta and North Carolina samples for the total value of informal social support and the total value of formal social support. Next 12 sources of informal support and 7 sources of formal social support were examined. Finally the t-test was computed for 12 types of support which were provided by the various informal and formal support sources.

Hypothesis 2

The second hypothesis stated that the adjustment to the rearing of a handicapped or at-risk child is influenced by the informal and formal social support provided by others.

In order to establish if relationships existed among the variables, zero order correlations were computed for the independent

variables for the total group, the Alberta sample, and the North Carolina sample. Correlations were also computed for the relationship between the independent variables and the dependent variables for each group.

Hierarchal multiple regression analyses (Cohen & Cohen, 1983) were then performed to determine the unique contributions of the 15 independent variables to the dependent variables. In each analysis personal characteristics, family characteristics, social support, and child characteristics were partialled from the total amount of variance accounted for in the independent variable. Variables were entered into the analysis in a hierarchal manner, and the amount of variance accounted for by each was determined at the successive steps. The effects of informal and formal social support were assessed only after the influences of the personal and family characteristics were partialled from the total amount of variance accounted for in each dependent measure.

Hypothesis 3

The third hypothesis stated that because of the differences in the sources and types of support available to the Alberta and North Carolina samples, there will be differences in the effect of social support on personal and time demands, personal well-being, and family integrity.

To assess the differential effects of social support in the two samples group by independent variable interactions were computed for each of the dependent measures. The full range of scores on each independent measure were included in the calculations.

Comparative Analysis

Comparative analyses of the data were conducted using both the t-test and Chi Square. Separate calculations were made for the sample of North Carolina mothers and the Alberta mothers. Although this information does not directly answer any of the three hypotheses, it does provide useful information about the samples and was included for that reason.

Post Hoc Analysis

The Alberta mother and father data were analyzed to determine if there were any differences in the sources and types of support available to the two groups. The t-test was computed for the means of the Alberta mother and father samples for the total value of informal social support and the total value of formal social support. Then 12 sources of informal support and 7 sources of formal social support were examined. Finally, the t-test was computed for 12 types of support which were provided by the various informal and formal support sources.

CHAPTER IV

RESULTS

The results of the statistical analysis of the data for Alberta and North Carolina mothers are presented in three sections as they relate to each of the three hypotheses of this study. Following the discussion of the hypotheses, a comparative analysis of independent variables is presented. A post hoc comparative analysis of the Alberta mother and father data is also presented.

Hypothesis 1

Hypothesis 1 stated that it is predicted that there are differences in the sources and types of informal and formal social support available to Alberta mothers and North Carolina mothers.

In order to determine if differences exist between the two samples, t-tests were computed for the means of the Alberta and North Carolina samples for the total value of informal social support and the total value for formal social support. Next 12 sources of informal social support and 7 sources of formal social support were examined. Finally the t-tests were computed for 12 types of support which were provided by the various informal and formal support sources. These data were derived from the Inventory of Social Support (Trivette, et al., 1986).

Upon examination of the total score for the sources of informal social support it was found that the North Carolina sample had significantly greater sources of informal support (see Table 1). No significant differences were found for the total source of formal social support (see Table 2).

An examination of each item among the informal sources of support was undertaken. If was found that 4 of the 12 sources of informal support were significant, including the respondent's parents, spouse's parents, other relatives, and co-workers. All of the positive findings favored the North Carolina sample (see Table 1).

Although there was no significant difference found in the total score for sources of formal social support, two individual items were significant (see Table 2). The Alberta sample showed a greater amount of formal support from public health units and Handicapped Children's Services (Department of Social Services in North Carolina).

Thus, it would appear that the North Carolina mothers use more sources of informal support, suggesting that either there are, in fact, differences in availability of informal support sources, or differences in the utilization of those potential sources. The Alberta mothers, on the other hand, use more of the formal social support sources which are available to them. This is not surprising in view of the differences in the health and social service systems between Alberta and North Carolina.

In the analysis of types of support, there were 4 significant findings among the 12 items (see Table 3). All of the significant findings were in favor of the North Carolina sample. This indicates that in most instances there were no differences between the groups, but where differences occurred, it was always the North Carolina mothers who used more of the various types of support, including someone to provide encouragement, loan money, provide transportation, assist with child care, and spend time with the child.

Hypothesis 2

The second hypothesis stated that the adjustment to the rearing of a handicapped or at-risk child is influenced by the informal and formal social support provided by others.

Correlation Analysis

Bivariate correlation analyses were performed because it was expected that a number of independent variables would themselves be correlated and therefore have shared variance (see Tables 4, 5, and 6). The correlations between independent variables and dependent variables were also examined (see Tables 7, 8, and 9). Based on these correlations, it was anticipated that there would be significant findings in the hierarchal multiple regression analyses to follow.

The direction of the relationships were generally as predicted. Income and SES were negatively correlated with marital status. In the Alberta sample, there was also a negative relationship between income and need for support; while in the North Carolina sample, adequacy of insurance and informal support were negatively correlated. Five independent variables were negatively correlated with IQ in the North Carolina sample. They were locus of control, marital status, adequacy of insurance, the occurrence of financial events, and age. Adequacy of insurance was significantly related to both informal and formal support in the North Carolina sample. Locus of control was negatively related to informal social support and formal social support in the Alberta sample and to formal support in the North Carolina sample.

Respondent age was not related to any of the dependent measures. In the Alberta sample, SES was positively related to child-related time demands, time demands total, and general physical well-being. It was negatively correlated with family integrity in both the Alberta and North Carolina samples. Income was positively related to general physical and emotional well-being in the Alberta sample. It was negatively related to family integrity in the Alberta sample and to adult time demands in the North Carolina sample. In the Alberta sample locus of control was negatively related to all of the dependent measures except family integrity which was positively correlated. Marital status was positively related to adult time demands in the Alberta sample and family integrity in the North Carolina sample.

Employment status and length of community residence were significantly related to child-related time demands and the time demands total in the Alberta sample. Adequacy of insurance was negatively related to well-being and adult time demands and positively related to family integrity in the North Carolina sample. Occurrence of financial events was positively related to family integrity in both the Alberta and North Carolina samples. Occurrence of financial events was negatively related to well-being in the Alberta sample and to child-related time demands and two well-being measures in the North Carolina sample. The rating of financial events was related only to general emotional well-being in the Alberta sample.

The perceived need for support was positively related to family integrity in both the Alberta and North Carolina samples, and

negatively related to both well-being and time demands in Alberta. In the North Carolina sample, perceived need for support was also negatively related to well-being. Informal social support, but not formal social support, was positively related to time demands and well-being in Alberta. Perceived need for support was positively related to both general emotional and physical well-being in the North Carolina sample; however, perceived need for support was negatively correlated to family integrity in both samples.

Child age was negatively related to child-related physical well-being and the well-being total and positively related to family integrity in the Alberta sample. In the North Carolina sample, child age was negatively related to child-related time demands and child-related emotional well-being. Finally, child IQ was positively related to time demands in the Alberta sample and well-being in the North Carolina sample; however, there was a negative correlation with the well-being total and family integrity.

Hierarchal Multiple Regression Analysis

Hierarchal multiple regression analyses (Cohen & Cohen, 1983) were performed to determine the unique contributions of the 15 independent variables to the dependent variables. In each analysis personal characteristics, family characteristics, social support, and child characteristics were partialled from the total amount of variance accounted for in the dependent variable. It was presumed that the amount of variance accounted for in the dependent measures by social support was beyond that attributable to personal characteristics and family characteristics. Variables were entered into the analysis in a hierarchical manner, and the amount of

variance accounted for by each was determined at the successive steps. Thus, the effects of informal and formal social support were assessed only after the influences of the personal and family variables were partialled from the total amount of variance accounted for in the dependent measures. In each analysis, the increments (I) in R^2 were determined at each successive step to determine if the different independent measures accounted for significant proportions of the variance in the dependent measures.

Personal Time Commitment total scores. The findings for time demands on the Personal Time Commitment Scale total scores are found in Table 10. neither informal nor formal social support contributed significantly to total time demands, except in the case of informal support for the North Carolina sample. In the total sample significant proportions of increments were attributable to locus of control, length of community residence, the occurrence of financial events, and child IQ. Locus of control, occurrence of financial events, perceived need for support, and child IQ were significant for the Alberta-sample, while respondent age and adequacy of insurance were significant for the North Carolina sample.

Adult time demands scores. Formal support was significantly related to the adult time demands in the total sample (see Table 11). Locus of control contributed significantly to adult time demands in the total sample as well as the Alberta and North Carolina samples. In the Alberta sample there were significant increments for marital status and child IQ, while in the North Carolina sample adequacy of insurance was a significant factor.

Locus of control was a significant factor in dealing with adult time demands in both the Alberta and North Carolina samples. It suggests that feeling in control of ones life increases ones ability to deal with the general demands of managing a home and family. Adequacy of insurance accounted for approximately 15 percent of the variance in the multiple regression analysis for the North Carolina sample. This is clearly an important issue for that particular group.

Child-related time demand scores. Neither informal nor formal social support contributed significantly to child-related time demands (see Table 12). In the total group child-related time demands were most influenced by SES, length of community residence, and the occurrence of financial events. However, in the Alberta sample only SES contributed significantly to child-related time demands, and for the North Carolina sample only child age accounted for the significant increment in scores. Child age may be a factor in the North Carolina sample because the children of the mothers in that sample were older.

In summary, neither informal social support nor formal social support were significant factors dealing with time demands. However, in the case of adult time demands, locus of control was an important variable.

Well-being total scores. The findings for well-being were derived from the Personal Well-Being Index (Trivette & Dunst, 1985). Informal social support contributed approximately six percent of the increment on the well-being total score. This was a significant increment (see Table 13). The adequacy of insurance was significant

for the total group. That variable contributed an increment of approximately 29 percent to the North Carolina sample, while there was no increment for the Alberta sample. Perceived need for support was significant across all the groups and most significant for the North Carolina sample (I=.194). Locus of control and the occurrence of financial events also contributed significant increments in the Alberta sample.

General emotional well-being scores. Informal social support contributed approximately nine percent to the total score for general emotional well-being (see Table 14). The increments were not significant for either the Alberta sample or the North Carolina sample, however. On the other hand, perceived need for support was significant across groups with an increment of approximately 14 percent for North Carolina and approximately 5 percent for Alberta. Adequacy of insurance accounted for approximately 26 percent of the variance for the North Carolina sample, but was not significant for Alberta. Locus of control (I=.062) and occurrence of financial events (I=.091) were significant for the Alberta sample but not for North Carolina.

General physical well-being scores. Informal support provided a significant increment to the total general physical well-being score, but not the individual sample scores (see Table 15). The perceived need for support score was significant across samples. Adequacy of insurance was responsible for approximately 22 percent of the North Carolina score, while there was no increment for the Alberta sample. Locus of control, SES, and the occurrence of financial events were

significant for the Alberta sample, but not for North Carolina; while child IQ was significant for the North Carolina sample only.

Child-related emotional well-being scores. Informal social support provided a significant increment to the total child-related emotional well-being score, but was not significant for either Alberta or North Carolina alone (see Table 16). The perceived need for support was significant across the groups. Adequacy of insurance was significant for North Carolina only, while both locus of control and the occurrence of financial events were significant for Alberta only.

Child-related physical well-being scores. Informal social support was significant to the total child-related physical well-being score, but not to either Alberta or North Carolina (see Table 17). The perceived need for support was significant across groups in approximately equal proportions. Locus of control, the occurrence of financial events, and child age were significant for Alberta, but not for the North Carolina sample.

In summary, informal social support, but not formal social support contributed significantly to well-being in the total sample. Perceived need for support also consistently contributed to well-being in both the Alberta and North Carolina sample, as well as the total group. There were also sample-specific findings such as the contribution of the adequacy of insurance to the North Carolina sample and locus of control and the occurrence of financial events to the Alberta sample.

Family integrity scores. Findings for family integrity were derived from the Family Inventory of Resources and Management

(McCubbin, et al., 1981). Informal social support contributed significantly to family integrity in the total sample (see Table 18). The perceived need for social support was significant across the groups, and it was the only significant increment for the North Carolina sample on this scale. Locus of control, the occurrence of financial events, and child age were also significant in the Alberta sample.

In summary informal social support, but not formal social support contributed significantly to family integrity in the total sample; while perceived need for support was significant across the samples. Adequacy of insurance which was consistently important to the well-being of the North Carolina sample, did not contribute to family integrity.

Hypothesis 3

The third hypothesis stated that because of the differences in the sources and types of support available to the Alberta and North Carolina samples, there will be differences in the effect of social support on personal time demands, personal well-being, and family integrity.

Group by independent variable interactions were computed for each of the dependent measures to determine differences in the effect of social support of each. Total scores for each independent variable were included in the computations.

Time Demands

For time demand (Tables 10-12) there were significant findings across the total and subscale scores. Findings for time demands were derived from the Personal Time Commitment Scale (Trivette & Dunst,

1985). The test for interaction produced six significant findings for the total time demands dependent variable. The effects were greater for the Alberta sample on five of the independent variables (SES, the rating of financial events, informal support, child age, and IQ). The effects of maternal age on the total time demands score was greater for the North Carolina mothers as compared to the Alberta mothers.

For the analysis of adult time demand scores the test for interaction produced seven significant findings. The effects of maternal age, the impact of financial occurrences, and child age on adult time demands were greater for the North Carolina mothers. The effects of SES, the rating of financial events, perceived need for support, and IQ were greater for Alberta mothers than the North Carolina mothers.

The test for interaction produced eight significant findings in the analysis of child-related time demands. The effects of all the independent variables were greater for the Alberta sample.

Well-Being

Tables 13-17 show the results for the well-being measures. The test for interaction produced three significant findings on the total score for well-being. The effects of formal support on well-being were greater for the Alberta sample than the North Carolina sample. Child age and IQ produced greater effects on well-being for the North Carolina mothers.

For the analysis of general physical well-being scores the test for interaction produced eight significant findings. The effects of SES, support functions, informal support, and formal support were

greater for the Alberta mothers. The effects of perception of control, the impact of financial occurrences, child age, and IQ were greater for the North Carolina mothers than for the Alberta mothers.

The test for interaction produced eight significant findings on the general emotional well-being scores. The effects of maternal age, support functions, and formal support were greater for the Alberta mothers than for the North Carolina mothers. Perception of control, length of community residence, Financial Impact Survey total occurrences, Financial Impact Survey total rating, and child age produced greater effects on general emotional well-being for the North Carolina mothers than for the Alberta mothers.

The test for interaction produced five significant findings on the child-related emotional well-being dependent variable. The effects of maternal age, and informal support were greater for the Alberta sample. Perception of control, length of community residence, and IQ produced greater effects on child-related emotional well-being for the North Carolina mothers.

For the analysis of child-related physical well-being scores the test for interaction produced four significant findings. Only informal support produced greater effects for the Alberta mothers; while maternal age, perception of control, and child age produced greater effects on child-related physical well-being for the North Carolina mothers.

Family Integrity

The test for interaction produced three significant findings for the dependent variable family integrity. The effects of SES and child age were greater for the Alberta sample compared to the North

Carolina sample. The effects of income were greater for the North Carolina mothers. The findings for the family integrity measure (Family Inventory of Resources and Management) are reported in Table 18.

Comparative Analyses

Alberta and North Carolina Mothers

The t-test for independent variables was computed for means of the North Carolina and Alberta samples for 10 variables (see Table 19). There were no significant differences for six of the variables examined including respondent age, SES, locus of control, number of dependents, length of community residence, and child IQ. The two groups were found to differ significantly on the total amount of monthly family income with the Alberta families having the greater income. Both the number of economic changes since the birth of the child and the rating of the impact of those changes were significantly higher for the North Carolina mothers. Child age was significantly different with the mean age of the youngsters in the North Carolina sample being seven months higher.

A Chi Square analysis of six dichotomous variables indicated that three were significantly different (see Table 20). The two groups differed significantly as to whether or not they had health insurance and the adequacy of the insurance. Canadian mothers were more likely to have health insurance and to feel that it was adequate for their family's needs; while the North Carolina mothers were less likely to have insurance and less likely to feel it was adequate, even if they had some coverage. Child diagnosis was compared using the categories of physically handicapped and not physically handicapped. It was

found that the North Carolina sample had a significantly greater number of physically handicapped youngsters. No significant differences were found for the proportion of males to females in each sample. Nor were there significant differences in marital status or the employment status of the spouse. In both samples the vast majority of the respondents were married and their husbands were generally employed.

Post Hoc Analysis of Mother and Father Data

In order to determine if differences exist between the Alberta mothers and fathers in their sources and types of support, t-tests were computed for the means of those items. Twelve sources of informal social support and seven sources of formal support were examined. T-tests were also computed for 12 types of support which were provided by various informal and formal support sources. These data were derived from the Inventory of Social Support (Trivette, et al., 1986).

Only one difference was found between the two groups in sources of informal social support (see Table 21). Fathers had significantly more support from co-workers than did the mothers. A higher proportion of fathers were employed, thus increasing the chances for co-workers to act as support providers.

Similarly, only one significant difference in formal support sources existed between the two groups (see Table 22). Mothers were twice as likely to find early intervention a source of support. Mothers are most frequently the direct recipients of regular early intervention service, therefore, there are more opportunities for them to find it a useful support source.

No significant differences were found between the two groups on the types of support which were provided by the various informal and formal support sources (see Table 23). Thus, it appears that the two groups are remarkably similar in their sources and types of support. The differences that did occur were not surprising. It was surprising that there were not greater differences between the groups.

CHAPTER V

DISCUSSION

The purpose of this study was to compare the influences of social support on parent, family, and child functioning among a sample of Alberta mothers of handicapped young children and a sample of North Carolina mothers with handicapped young children. Specifically the study sought to compare the Alberta sample with the North Carolina sample to determine if the two groups were similar or different in their sources and types of support, and to determine whether or not social support was related to personal time demands, personal well-being and family integrity in similar or different ways in the two samples.

This chapter will address each of the three hypotheses of the study, present a general discussion of the role of social support, and finally, consider some of the implications of this research.

Hypothesis 1

Hypothesis 1 stated that it is predicted that there are differences in the sources and types of informal and formal social support available to Alberta mothers and North Carolina mothers.

The data clearly suggests that there are differences in the sources and types of support which are used by the two groups. The North Carolina mothers perceived more sources of informal support and used more types of support. On the other hand, Alberta mothers relied more on the formal support provided by the public health system and social service system (specifically Handicapped Children's

Services). From the data it is impossible to tell the reasons for the differences. It is not known if there are greater sources of support available to the North Carolina mothers or if they use their support sources differently. It is possible that there are cultural differences which foster a greater availability and use of support in the North Carolina population.

For example, although there was no significant difference in the length of community residence, it is suspected that the North Carolina mothers have lived in the area for a longer period and that they are more likely to have extended family near by. It is also suspected that if the Alberta mothers have lived in the area for a shorter period, it is likely that they have fewer informal support sources close at hand. As a result they may see themselves as more self-reliant and, therefore, less likely to call on members of their informal network for assistance or support.

It is also possible that the formal support systems available to the Alberta population decrease the likelihood that there would be effective us of the informal support sources. The differences in the two groups may be the result of including mothers from two metropolitan areas in the Alberta sample. In the North Carolina sample none of the respondents were from cities. If the two samples had been matched for community size, the results may have been different.

Hypothesis 2

Hypothesis 2 stated that adjustment to the rearing of a handicapped or at-risk child is influenced by the various types of informal and formal support provided by others.

The data indicates that social support was one, but by no means the only, factor that contributed to the adjustment to rearing of a handicapped or at-risk child. In the total sample informal social support contributed significantly to well-being and family integrity, but not to time demands. Formal social support was related to adult time demands and family integrity, but not to well-being. These findings are consistent with previous results reported by Dunst (1985).

Time demands were unrelated to the perceived need for support in the total group. The perceived need for support was related to all of the well-being measures as well as family integrity. This suggests that there were a variety of needs in the total sample that were not being met by the existing support sources. Dunst and Trivette (1987) have begun to explore a variety of issues related to help-giving. Their research to date indicates that help provided by others is often not the help that is sought or desired and that this incongruence may be harmful to families.

Length of community residence contributed to child-related time demands which may indicate that familiarity and knowledge of informal and formal support sources increases as length of residence in the community increases. Length of community residence did not, however, contribute to either well-being or family integrity. SES was related to child-related time demands and family integrity. It is likely that families from higher socio-economic groups have more resources which in turn decrease time demands and increase family integrity. Locus of control was related to time demands, but not to well-being or family integrity. A greater sense of personal control may

contribute to the ability to manage time more effectively, or increased ability to manage time effectively may enhance the sense of personal control.

Adequacy of insurance was unrelated to time demands, but it was related to general physical well-being and the total well-being score, as well as family integrity. The occurrence of financial events, but not the rating of the events, was related to time demands, well-being, and family integrity suggesting that the events themselves had a generally negative effect. Child characteristics were generally unrelated to the dependent measures. For example, child age was only related to child-related physical well-being, while child IQ was related to adult time demands and the total time demands scores. This is consistent with findings reported by Dunst (1985).

When the two samples were considered separately, striking differences emerged. Adequacy of insurance was significantly related to seven of the nine dependent measures in the North Carolina sample, but it was not related to any of the measures in the Alberta sample. On the other hand, locus of control and the occurrence of financial events were more frequently related to the dependent measures in the Alberta sample. Child characteristics were inconsistently related to the dependent measures in the two groups. Perceived need for support was related to the well-being measure and family integrity in both groups and to total time demands in the Alberta group. This certainly suggests that there are some unique characteristics in the two groups. It seems clear that the differences in the types of health insurance available to the two samples is an important factor

in the adjustment and rearing of a handicapped child. It is less clear why there were differences in locus of control and the occurrence of financial events, however.

Hypothesis 3

Hypothesis 3 stated that because of differences in the type of support available, there will be differences in the effect of support on personal time demands, personal well-being, and family integrity.

There were a number of interesting findings which support this hypothesis. For example, as informal social support increased among the Alberta sample, child-related time demands increased, but in the North Carolina sample child-related time demands decreased as informal social support increased. On the other hand, as informal social support increased in the Alberta sample, child-related emotional well-being increased, while in the North Carolina sample there was a decrease in well-being. In contrast there was an increase in general physical well-being and child-related physical well-being in both samples as informal social support increased. There was a marked increase in child-related emotional well-being as informal social support increased in the Alberta sample. It is interesting to note that there was a consistent positive relationship to increased informal social support in the Alberta sample, suggesting that the support available was generally useful. Whereas in the North Carolina sample the informal social support sometimes had negative effects. This illustrates the importance of matching support to the need identified by the recipient to insure that it is useful.

The results for formal social support were similar. In the Alberta sample general emotional well-being increased as formal social support increased, while in the North Carolina sample well-being decreased in both groups as formal social support increased. While this does not mean that formal social support is always harmful, it does indicate that it may be harmful. This suggests an important area for future research to determine the most beneficial ways to provide formal assistance and support.

As the perceived need for support increased, both adult and child-related time demands decreased in both groups. This result was not in the predicted direction and is not easily explained. In contrast, general emotional and physical well-being decreased as the perceived need for support increased in both groups. This is consistent with Dunst's findings (1985, 1987).

Several other interactions were of particular interest. Locus of control was consistently related to positive well-being in the North Carolina sample, however, in the Alberta sample well-being decreased as locus of control increased. The reasons for this difference are unclear. It would be of interest to further examine the data to determine exactly what the difference between the two groups is.

As length of community residence increased, child-related time demands decreased significantly in the Alberta sample and slightly in the North Carolina sample. This may be related to the earlier supposition that the North Carolina mothers have lived in the area longer and, thus, the magnitude of difference is in the direction predicted, but less pronounced because they remained in the same area for a longer period. Length of community residence was also

positively related to general emotional well-being in both groups and to child-related emotional well-being in the North Carolina sample. There was an unexplained negative effect for the Alberta sample.

In the North Carolina sample adult time demands increased as the occurrence of financial events increased, suggesting that the events were negative or at least stressful for that group. General emotional and general physical well-being also decreased as the occurrence of financial events increased in the North Carolina sample, to a lesser extent in the Alberta sample as predicted. In the North Carolina sample as child age increased, adult time demands increased and general emotional and general physical well-being increased, however, child-related physical well-being decreased. This may be due to the high percentage of physically handicapped youngsters in this group. As child IQ increased, time demands increased in the Alberta and general physical and child-related emotional well-being increased in the North Carolina sample. While the well-being results are as predicted, the increased time demands is less clear.

Post Hoc Analysis of Alberta Mother and Father Data

While not a formal part of the study, the results of the analysis of the data for 37 Alberta couples is interesting. Fathers reported co-workers as a greater source of informal support, while mothers indicated that early intervention workers were a greater source of formal support. No significant differences were found in the types of support available to the two groups. The fact that there were so few differences in the two samples is surprising. Generally we have come to believe that there are vast differences in the sources and

types of support required by men and women. This preliminary analysis of the data does not call for different conclusions, but rather for further exploration of the similarities and differences in support needs in the two groups.

Discussion

While not definitive, this research does contribute to a growing body of evidence that suggests that social support is an important mediating and intervening variable. It is shown to be generally related to parent and family outcomes even after other contributing variables have been partialled. The study confirms suspicions that differences exist between the two samples, and at the same time it lends support to the perception that informal and formal social support do contribute to positive functioning in individuals and families.

The whole notion of what social support is and how it operates is exceedingly complex. Dunst and his colleagues have contributed significantly to the definition and explanation of its role in assisting families of handicapped young children. By suggesting a family-focused definition of early intervention, he has opened the way for an alternative form of service which can directly serve to strengthen and empower parents and families.

Implications

Research Implications

This is clearly an area that requires further study. Prospective longitudinal research is required to determine more precisely how social support influences personal, family and child functioning. Qualitative investigations of the experiences of a few families could

provide detailed accounts of personal experiences of the process of adjustment to the birth and rearing of a handicapped child and the role of social support in that process. Further investigation of help-giving and receiving would provide important information for use in program development.

Program Implications

There is a need for provincial Early Intervention Programs to become more family-focused. In order to explore perceived need for support because of their significance in the findings, strengthening and empowering families should become priorities for service delivery. Ensuring that programs have the resources to meet families' needs as well as childs' needs should become a provincial priority. Mechanisms should be established provincially for the evaluation of Early Intervention Programs to insure that child and family needs are met.

Training Implications

Early intervention professions require specialized training in order to develop knowledge, skills, and attitudes which are in keeping with a family-focused approach. In the United States university training programs in early childhood special education have been developed throughout the country. In addition, numerous continuing education opportunities exist.

In Alberta this type of specialized training has recently been introduced at the University of Alberta. It is hoped that this new program will be produce early childhood special education professionals who will adopt a family-focused approach. This may be best accomplished by offering courses designed to teach students to

work in partnership with families. This will require specific skills in collaboration, as well as a belief that families are capable and should be viewed as the experts at determining their needs.

The Provincial Early Intervention Program has undertaken to provide periodic training to staff in local programs. Recognized experts in the field have been brought in to provide intensive training experiences for the early intervention staff. To date this effort has been very successful and should be continued and strengthened.

Implications for Government Policy

The presence of a universal health care system that promotes the health and well-being of families should be strengthened. Specifically, the Early Intervention Program should be given a higher priority because of the Government's commitment to the health and well-being of Albertans. This valuable program should be made available throughout the province. At the provincial level there should be resource staff available to assist the local programs with evaluation, training, and development.

Conclusions

The evidence from this study indicated that there are differences in the sources and types of support for Alberta mothers of handicapped young children and North Carolina mothers of handicapped young children, and there there are differences in the way support is related to time demands, personal well-being, and family integrity in the two groups. It also suggested that in both Alberta and North Carolina the adjustment to the rearing of a handicapped youngster is influenced by social support. While causal statements cannot be made

from this type of study, it is obvious that social support is one of several factors which influences parent and family functioning. These results suggest that researchers, practitioners, and policy makers needs to carefully examine the role of social support in parents and families of young handicapped children.

TABLE 1

Mean Scores and Standard Deviations (SD) for Alberta and North Carolina Samples on Sources of Informal Support

	Alberta (N-90)		North Carolina (N-58)		
Independent Variable	Mean	SD	Mean	SD	t
Self	4.58	2.31	4.48	2.48	0.26
Spouse	6.97	2.92	6.79	2.93	0.37
Children	2.00	2.03	1.96	2.21	0.10
Parents	2.77	2.55	4.69	3.54	-4.07**
Spouse's Parents	1.44	2.06	2.94	3.28	-3.11**
Siblings	2.11	2.55	3.00	3.26	-1.76
Spouse's Siblings	1.22	1.97	1.84	2.85	-1.45
Relatives	0.97	1.49	2.10	3.10	-2.57**
Friends	3.68	2.36	4.01	2.73	-0.75
Neighbors	0.83	1.35	1.25	2.18	-1.33
Church	0.72	1.51	0.36	0.98	1.72
Co-workers	0.36	0.90	1.20	2.23	-2.73**
Total	23.12	9.37	30.44	17.98	-2.86**

*p<.05, **p<.01

TABLE 2

Mean Scores and Standard Deviations (SD) for Alberta and North Carolina Samples on Sources of Formal Support

	Alberta (N-90)		North Carolina (N-58)		
Independent Variable	Mean	SD	Mean	SD	t
Child Care	1.20	1.58	1.75	2.38	-1.57
Therapist	0.38	1.14	0.77	1.78	-1.47
Doctors	1.71	1.68	2.00	1.90	-0.94
Early Intervention	3.75	2.10	3.35	2.74	0.95
Health Unit	0.81	1.33	0.24	0.78	3.24**
Handicapped Children's Services	0.71	0.96	0.16	0.62	4.19**
Other Agencies	0.86	1.63	0.71	1.55	0.55
Total	9.44	5.76	8.93	7.49	0.44

*p<.05, **p<.01

TABLE 3

Mean Scores and Standard Deviations (SD)
for Alberta and North Carolina Samples
on Types of Support

	Alberta (N-90)		North Carolina (N-58)		
Independent Variable	Mean	SD	Mean	SD	t
Help/talk with	4.32	2.45	4.60	3.21	-0.57
Encourage	3.27	2.22	4.17	2.81	-2.04*
Have fun with	3.41	2.14	3.79	2.62	-0.93
Answer questions	3.06	1.86	3.60	2.56	-1.38
Advocacy	1.50	0.91	1.81	1.29	-1.59
Information	2.52	1.48	2.72	2.11	-0.63
Loans money	1.25	1.02	1.89	2.21	-2.07*
Housekeeping/ maintenance	1.77	0.80	2.01	1.43	-1.16
Transportation	1.91	1.00	2.56	2.27	-2.07*
Child care	2.71	1.53	3.77	2.52	-2.89**
Time with child	3.65	2.01	4.58	2.95	-2.10*
Acceptance of child	7.90	4.03	7.89	4.31	0.00

*p<.05, **p<.01

TABLE 4

Correlations Between Independent Variables - Total

*p<.05	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Respondent Age 1		.186*	.212*	-.067	-.016	-.046	.228*	.029	-.191*	-.078	-.162	-.153*	-.079	.120	-.016
SES 2			.624*	-.299*	-.352*	.134	-.001	-.165	-.022	-.030	-.137	.054	.088	-0.124	.060
Income 3				-.271*	-.430*	.039	.033	-.220*	-.115	-.041	-.175*	-.020	.125	-.113	.020
Locus of Control 4					.042	-.031	.055	.178*	-.004	-.033	.013	-.166	-.282*	.046	-.042
Marital Status 5						.019	.001	.095	.100	.079	.091	-.107	-.017	.095	-.068
Employment Status 6							.014	.065	.260*	.068	.072	.134	.116	-.003	-.005
Community Residence 7								-.045	-.065	-.067	.022	.052	-.058	.079	.104
Adequacy of Insurance 8									.175*	.033	.041	-.071	-.145	.201*	-.065
Financial Occurrence 9										.573*	.161	.157	.091	.107	-.190*
Financial Rating 10											.096	.137	.042	.045	.092
Need for Support 11												-.027	.053	.042	-.035
Informal Support 12													.454*	.131	.003
Formal Support 13														.145	-.149
Child Age 14															-.097
Child IQ 15															

TABLE 5

Correlations Between Independent Variables - Alberta

*p<.05	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Respondent Age 1		.247*	.123	-.110	-.103	-.007	.215*	-.090	-.251*	-.211*	-.290*	-.052	-.043	.030	-.012
SES 2			.614*	-.177*	-.398*	.173	-.033	-.146	-.067	-.172	-.186*	.061	.092	-.045	-.176*
Income 3				-.225*	-.513*	.026	-.045	-.138	-.140	-.182*	-.309*	.038	.106	.058	-.125
Locus of Control 4					.038	-.079	.085	-.059	.045	.043	.163	-.260*	-.321*	-.003	.018
Marital Status 5						.171	.142	-.103	.317*	.410*	.182*	-.106	.052	-.058	-.033
Employment Status 6							-.062	-.102	.301*	.084	.020	.044	.106	.103	.037
Community Residence 7								.083	-.060	-.055	.067	-.073	-.162	.105	.121
Adequacy of Insurance 8									.060	.017	.098	.181*	-.078	.052	.084
Financial Occurrence 9										.743*	.281*	.050	.146	-.001	-.127
Financial Rating 10											.152	-.017	.153	.020	-.041
Need for Support 11												-.143	-.097	.060	-.044
Informal Support 12													.337*	.031	.053
Formal Support 13														.031	-.083
Child Age 14															.208*
Child IQ 15															

TABLE 6

Correlations Between Independent Variables - North Carolina

*p<.05	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Respondent Age 1		.105	.275*	.003	.061	-.056	.262*	.205	-.096	.098	-.027	-.185	-.120	.257*	-.038
SES 2			.652*	-.471*	-.280*	.110	.045	-.160	.040	.146	-.076	.108	.086	-.174	.306*
Income 3				-.310*	-.445*	.168	.277*	-.266*	.055	.265*	-.030	.107	.127	-.123	.121
Locus of Control 4					.039	-.005	-.005	.178	-.148	-.186	-.185	-.155	-.230	.061	-.352*
Marital Status 5						-.026	-.105	.527*	.197	-.063	.108	-.173	-.009	.223	-.398*
Employment Status 6							.069	.235*	.083	-.064	.131	.142	.138	.010	-.026
Community Residence 7								-.108	-.210	-.192	-.064	.110	.176	-.035	.086
Adequacy of Insurance 8									.274*	-.051	-.064	-.502*	-.253*	.306*	-.304*
Financial Occurrence 9										.318*	-.017	.149	.070	.113	-.318*
Financial Rating 10											.060	.157	-.046	-.062	-.158
Need for Support 11												.040	.211*	.017	-.022
Informal Support 12													.584*	.096	.004
Formal Support 13														.264*	-.224*
Child Age 14															-.352*
Child IQ 15															

TABLE 7

Correlations Between Independent and Dependent Variables - Total Sample

	Respondent Age	SES	Income	Locus of Control	Marital Status	Employment Status	Community Residence	Adequacy of Insurance	Financial Occurrence	Financial Rating	Need for Support				
Adult Time Demands	-.103	-.098	-.124	.172*	.194*	-.015	-.015	.018	-.035	.051	-.089	.116	-.077	.040	.172
Child-Related Time Demands	.120	.250*	.233*	-.188*	-.136	.100	-.209*	-.090	-.197*	-.156	-.165*	0.038	-.008	-.212*	.150
Time Demands Total	.059	.160	.163	-.234*	-.009	.084	-.171*	-.063	-.179*	-.101	-.178*	-.166*	-.282	-.166*	.206*
General Emotional Well-Being	.038	.133	.204*	-.188*	-.103	-.085	.046	-.224*	-.284*	-.083	-.339*	.293*	.086	-.075	.136
General Physical Well-Being	.050	.156	.148	-.199*	-.044	-.051	-.065	-.215*	-.260*	-.101	-.339*	.171*	.057	-.095	.081
Child-Related Emotional Well-Being	-.072	.047	.006	-.160	-.069	-.037	-.027	-.139	-.238*	-.018	-.317*	.206*	-.025	-.138	.197*
Child-Related Physical Well-Being	-.014	-.035	-.002	-.101	.021	-.013	-.056	-.133	-.221*	-.005	.336*	.161	.039	-.202*	.114
Well-Being Total	-.031	.095	.107	-.171*	-.045	-.034	-.023	-.226*	-.273*	-.072	-.389*	.258*	.052	-.166*	.151
Family Integrity	-.102	-.219*	-.215*	.199*	.167*	.074	.087	.228*	.353*	.072	.363*	-.205*	.071	-.001	-.180*

*p<.05

TABLE 8

Correlations Between Independent and Dependent Variables - Alberta Sample

	Respondent Age	SES	Income	Locus of Control	Marital Status	Employment Status	Community Residence	Adequacy of Insurance	Financial Occurrence	Financial Rating	Need for Support	Informal Support	Formal Support	Child Age	Child IQ
Adult Time Demands	-.147	-.084	-.089	-.200*	.248*	-.012	-.009	.059	-.080	.036	-.117	.143	-.076	-.118	.223*
Child-Related Time Demands	.065	.304*	.135	-.210*	-.150	.229*	-.225*	-.014	-.108	-.086	-.262*	.205*	.005	-.111	.139
Time Demands Total	-.019	.190*	.067	-.264*	.017	.176*	-.173*	.018	-.134	-.056	.264*	.216*	-.014	-.105	.219*
General Emotional Well-Being	.119	.128	.199*	-.293*	-.034	.000	.050	-.031	-.305*	-.186*	-.347*	.261*	.145	-.074	.087
General Physical Well-Being	.033	.248*	.240*	-.357*	.025	-.003	-.056	-.094	-.243*	-.146	-.367*	.188*	.146	-.205*	.095
Child-Related Emotional Well-Being	.030	.056	.007	.269*	.048	-.051	-.094	-.060	-.266*	-.107	-.345*	.229*	.025	-.081	.136
Child-Related Physical Well-Being	.053	.011	.020	-.267*	.073	-.008	-.052	-.074	-.216*	-.135	-.368*	.206*	.067	-.273*	.107
Well-Being Total	.065	.121	.123	-.331*	.006	-.005	-.042	-.072	-.277*	-.158	-.405*	.258*	.107	-.178*	.074
Family Integrity	-.124	-.213*	-.276*	.301*	.116	.120	.140	.106	.364*	.158	.440*	-.187*	-.015	.030	-.087

*p<.05

TABLE 9

Correlations Between Independent and Dependent Variables - North Carolina Sample

	Respondent Age	SES	Income	Locus of Control	Marital Status	Employment Status	Community Residence	Adequacy of Insurance	Financial Occurrence	Financial Rating	Need for Support	Informal Support	Formal Support	Child Age	Child IQ
Adult Time Demands	.020	-.208	-.258*	-.085	.069	-.123	-.122	-.283*	.049	.098	-.046	.106	-.124	.059	.108
Child-Related Time Demands	.215	.047	.029	-.090	-.103	.113	.029	-.004	-.226*	-.098	.051	-.100	-.119	-.257*	.159
Time Demands Total	.281*	-.027	-.060	-.154	-.042	.087	-.035	-.160	-.153	-.044	.020	-.090	-.005	-.088	.126
General Emotional Well-Being	-.096	.121	.125	.004	-.199	-.083	.106	-.573*	-.209	.129	-.335*	.446*	.084	-.019	.191
General Physical Well-Being	.042	-.013	-.083	.042	-.133	-.078	-.030	-.403*	-.242*	.040	-.304*	.250*	-.060	.080	.303*
Child-Related Emotional Well-Being	-.191	.051	.068	-.009	-.104	-.041	.067	-.400*	-.232*	.104	-.276*	.187	-.083	-.257*	.303*
Child-Related Physical Well-Being	-.167	-.117	-.115	.123	-.051	-.003	-.040	-.237*	-.159	.135	-.293*	.179	.004	-.115	.115
Well-Being Total	-.176	.037	-.001	.096	-.117	-.049	.061	-.506*	-.213	.123	-.371*	.349*	-.022	-.126	-.250*
Family Integrity	-.044	-.220	-.106	.046	.232*	.007	-.038	.423*	.330*	-.085	.262*	-.282*	.117	-.063	-.295*

*p<.05

TABLE 10

Multiple Regression Coefficients and Increments (I) in R^2 and Group by Independent Variable Interaction (F) for the Analysis of Time Demands Total Scores

	Total (N=148)		Alberta (N=90)		NC (N=58)		Group x I.V. Interaction
Independent Variable	R^2	I	R^2	I	R^2	I	F
Respondent Age	.004	.004	.000	.000	.079*	.079*	7.180*
SES	.026	.023	.041	.040	.082	.003	27.980**
Income	.029	.003	.045	.004	.102	.019	.001
Locus of Control	.065	.036*	.108*	.064*	.146	.044	.148
Marital Status	.068	.802	.112	.003	.178	.032	.012
Employment Status	.072	.004	.123	.012	.205	.027	.002
Community Residence	.103*	.032*	.142	.018	.212	.007	.630
Adequacy of Insurance	.104	.001	.148	.006	.300*	.088*	.050
Financial Occurrence	.152**	.048**	.200*	.052*	.303	.003	.596
Financial Rating	.152*	.000	.211*	.011	.306	.003	4.710*
Need for Support	.171**	.019	.254*	.043*	.313	.007	2.230
Informal Support	.171*	.000	.266*	.012	.385	.072*	47.610**
Formal Support	.185*	.013	.300**	.034	.386	.001	1.490
Child Age	.196*	.011	.301*	.001	.415	.029	8.590**
Child IQ	.230**	.034*	.359**	.058*	.415	.000	93.320**

*p<.05, **p<.01

TABLE 11

Multiple Regression Coefficients and Increments (I) in R^2 and Group by Independent Variable Interaction (F) for the Analysis of Adult Time Demand Scores

I.V.	Total (N=148)		Alberta (N=90)		NC (N=58)		Group * Interaction
Independent Variable	R^2	I	R^2	I	R^2	I	F
Respondent Age	.011	.011	.022	.022	.000	.000	8.580**
SES	.017	.006	.024	.002	.045	.045	35.050**
Income	.022	.005	.027	.003	.077	.032	.001
Locus of Control	.071*	.049	.084	.057*	.185	.108*	2.370
Marital Status	.089*	.018	.127*	.043*	.199	.014	.092
Employment Status	.090*	.001	.133	.006	.200	.002	.475
Community Residence	.090	.000	.133	.000	.206	.006	.000
Adequacy of Insurance	.090	.000	.145	.012	.355*	.149**	.441
Financial Occurrence	.102	.012	.185	.040	.388*	.033	11.089**
Financial Rating	.108	.006	.190	.004	.393*	.004	29.700**
Need for Support	.126	.018	.210	.021	.429*	.037	100.000**
Informal Support	.136	.009	.216	.006	.468**	.038	.870
Formal Support	.172*	.036	.256*	.040	.491*	.023	.089
Child Age	.172*	.001	.263*	.007	.529**	.038	121.000**
Child IQ	.198*	.026	.310*	.047*	.546**	.018	16.000**

*p<.05, **p<.01

TABLE 12

Multiple Regression Coefficients and Increments (I) in R^2 and Group by Independent Variable Interaction (F) for the Analysis of Child-Related Time Demand Scores

	Total (N=148)		Alberta (N=90)		NC (N=58)		Group x I.V. Interaction
Independent Variable	R^2	I	R^2	I	R^2	I	F
Respondent Age	.015	.015	.004	.004	.046	.046	4.000*
SES	.068**	.054**	.093*	.088**	.047	.001	52.560**
Income	.076*	.008	.097*	.004	.051	.004	.000
Locus of Control	.088*	.012	.127*	.030	.059	.008	.472
Marital Status	.089*	.001	.133*	.006	.087	.028	.003
Employment Status	.096*	.007	.167*	.034	.111	.024	.002
Community Residence	.148**	.052**	.199*	.032	.112	.000	12.809**
Adequacy of Insurance	.151**	.003	.200*	.001	.113	.001	.003
Financial Occurrence	.191**	.040*	.222*	.022	.152	.039	.063
Financial Rating	.194**	.003	.231*	.009	.156	.004	4.035*
Need for Support	.202**	.008	.263*	.032	.156	.000	7.635**
Informal Support	.202**	.000	.277*	.014	.161	.004	14.578**
Formal Support	.207**	.004	.295**	.018	.170	.010	.082
Child Age	.227**	.021	.296*	.002	.267*	.097*	59.170**
Child IQ	.242**	.014	.320*	.023	.268	.001	79.855**

*p<.05, **p<.01

TABLE 13

Multiple Regression Coefficients and Increments (I) in R^2 and Group by Independent Variable Interaction (F) for the Analysis of Total Well-Being Scores

	Total (N=148)		Alberta (N=90)		NC (N=58)		Group x I.V. Interaction
Independent Variable	R^2	I	R^2	I	R^2	I	F
Respondent Age	.001	.001	.004	.004	.031	.031	1.660
SES	.012	.011	.016	.012	.034	.003	.283
Income	.016	.005	.020	.004	.035	.000	.000
Locus of Control	.037	.021	.114*	.095**	.054	.020	2.790
Marital Status	.037	.000	.118	.003	.060	.006	.001
Employment Status	.039	.002	.121	.003	.065	.005	.000
Community Residence	.039	.000	.122	.001	.077	.012	1.640
Adequacy of Insurance	.072	.033*	.122	.000	.364*	.287**	.045
Financial Occurrence	.145*	.071**	.207*	.086**	.366*	.001	.446
Financial Rating	.151*	.008	.211*	.003	.414*	.048	1.040
Need for Support	.285**	.134**	.306**	.096**	.608**	.194**	.670
Informal Support	.346**	.062**	.332**	.026	.608**	.000	2.690
Formal Support	.358**	.012	.334**	.002	.621**	.013	4.840*
Child Age	.369**	.011	.355**	.021	.635**	.015	11.630**
Child IQ	.377**	.007	.361**	.005	.663**	.028	8.880**

*p<.05, **p<.01

TABLE 14

Multiple Regression Coefficients and Increments (I) in R^2 and Group by Independent Variable Interaction (F) for the Analysis of General Emotional Well-Being Scores

	Total (N=148)		Alberta (N=90)		NC (N=58)		Group x I.V. Interaction
Independent Variable	R^2	I	R^2	I	R^2	I	F
Respondent Age	.002	.002	.014	.014	.009	.009	16.598**
SES	.018	.016	.025	.010	.027	.017	1.331
Income	.042	.024	.049	.024	.036	.009	.000
Locus of Control	.061	.019	.111*	.062*	.042	.006	19.382**
Marital Status	.063	.001	.114	.003	.058	.016	.031
Employment Status	.070	.009	.115	.001	.104	.047	.073
Community Residence	.073	.003	.118	.003	.118	.014	6.450**
Adequacy of Insurance	.097	.024	.012	.002	.379**	.261**	.607
Financial Occurrence	.154**	.057**	.211*	.091**	.380*	.001	6.786*
Financial Rating	.160*	.006	.215*	.004	.405	.026	4.281*
Need for Support	.245**	.085**	.261*	.046*	.548**	.142**	15.630**
Informal Support	.336**	.091**	.298**	.036	.577**	.029	1.000
Formal Support	.345**	.009	.298**	.001	.618**	.041	29.060**
Child Age	.346**	.001	.304*	.005	.661**	.043*	192.580**
Child IQ	.351**	.005	.307*	.004	.663**	.002	.592

*p<.05, **p<.01

TABLE 15
Multiple Regression Coefficients and Increments (I) in R^2
and Group by Independent Variable Interaction (F)
for the Analysis of General Physical Well-Being Scores

	Total (N=148)		Alberta (N=90)		NC (N=58)		Group x I.V. Interaction
Independent Variable	R^2	I	R^2	I	R^2	I	F
Respondent Age	.003	.003	.001	.001	.002	.002	.034
SES	.025	.022	.062	.061*	.002	.000	115.976**
Income	.029	.004	.075	.012	.015	.013	.002
Locus of Control	.052	.023	.169**	.095**	.019	.003	24.065**
Marital Status	.053	.000	.195**	.025	.061	.042	.125
Employment Status	.058	.005	.204**	.010	.063	.002	.790
Community Residence	.062	.004	.206**	.002	.063	.000	1.613
Adequacy of Insurance	.091	.029*	.207*	.000	.285	.222*	.447
Financial Occurrence	.149*	.058**	.284**	.077**	.288	.003	4.656*
Financial Rating	.150*	.001	.285**	.001	.299	.011	3.382
Need for Support	.237**	.087**	.349**	.064**	.437*	.139**	6.395*
Informal Support	.270**	.033*	.357**	.008	.438*	.000	5.267*
Formal Support	.276**	.006	.357**	.000	.446*	.009	31.152**
Child Age	.277**	.001	.386**	.029	.503*	.057	340.845**
Child IQ	.278**	.001	.388**	.002	.561**	.058*	698.439**

*p<.05, **p<.01

TABLE 16
Multiple Regression Coefficients and Increments (I) in R^2
and Group by Independent Variable Interaction (F)
for the Analysis of Child-Related Emotional Well-Being Scores

	Total (N=148)		Alberta (N=90)		NC (N=58)		Group x I.V. Interaction
Independent Variable	R^2	I	R^2	I	R^2	I	F
Respondent Age	.005	.005	.001	.001	.036	.036	15.16**
SES	.009	.004	.003	.002	.041	.005	.529
Income	.009	.000	.006	.003	.052	.011	.001
Locus of Control	.034	.025	.081	.075*	.053	.001	14.409**
Marital Status	.040	.006	.087	.006	.054	.001	.001
Employment Status	.042	.002	.092	.005	.060	.006	.000
Community Residence	.042	.000	.096	.005	.070	.010	27.220**
Adequacy of Insurance	.054	.012	.098	.002	.204	.134*	.158
Financial Occurrence	.110	.056**	.164	.066*	.266	.022	.802
Financial Rating	.132*	.021	.183	.019	.258	.033	.043
Need for Support	.229**	.097**	.263*	.079**	.382*	.123**	1.063
Informal Support	.256**	.027*	.282**	.019	.386	.004	49.827**
Formal Support	.275**	.019	.294*	.012	.408	.022	1.384
Child Age	.281**	.006	.295*	.001	.409	.001	.115
Child IQ	.294**	.013	.302*	.007	.454	.045	150.260**

*p<.05, **p<.01

TABLE 17
Multiple Regression Coefficients and Increments (I) in R^2
and Group by Independent Variable Interaction (F)
for the Analysis of Child-Related Physical Well-Being Scores

	Total (N=148)		Alberta (N=90)		NC (N=58)		Group x I.V. Interaction
Independent Variable	R^2	I	R^2	I	R^2	I	F
Respondent Age	.000	.000	.003	.003	.012	.012	5.536*
SES	.001	.001	.003	.000	.023	.011	.000
Income	.002	.001	.003	.000	.024	.001	.000
Locus of Control	.015	.013	.064	.060*	.030	.007	14.590**
Marital Status	.015	.000	.069	.005	.038	.008	.019
Employment Status	.015	.000	.071	.002	.038	.000	.004
Community Residence	.018	.002	.074	.003	.038	.000	.019
Adequacy of Insurance	.034	.016	.075	.001	.120	.082	.095
Financial Occurrence	.087	.053**	.133	.058*	.124	.004	1.889
Financial Rating	.092	.006	.133	.000	.176	.052	.000
Need for Support	.202**	.110**	.235*	.101**	.307	.131*	.333
Informal Support	.229**	.027*	.252*	.017	.307	.000	12.685**
Formal Support	.232**	.003	.255*	.003	.308	.001	2.180
Child Age	.263**	.032*	.311**	.056*	.310	.002	35.254**
Child IQ	.268**	.005	.328**	.017	.327	.016	3.114

*p<.05, **p<.01

TABLE 18
Multiple Regression Coefficients and Increments (I) in R^2 and Group by Independent Variable Interaction (F) for the Analysis of Family Integrity Total Scores

	Total (N=148)		Alberta (N=90)		NC (N=58)		Group x I.V. Interaction
Independent Variable	R^2	I	R^2	I	R^2	I	F
Respondent Age	.010	.010	.015	.015	.004	.004	.053
SES	.052*	.042*	.051	.035	.050	.046	10.760**
Income	.061*	.009	.085	.035	.054	.004	6806.250**
Locus of Control	.078*	.017	.142*	.056*	.058	.004	.651
Marital Status	.085*	.008	.142*	.000	.107	.049	.002
Employment Status	.092*	.007	.165*	.023	.107	.000	.003
Community Residence	.100*	.008	.186*	.021	.108	.001	1.513
Adequacy of Insurance	.129*	.029*	.188*	.002	.294*	.186**	.246
Financial Occurrence	.218**	.089**	.288**	.100**	.321*	.028	.592
Financial Rating	.238**	.020	.312**	.024	.345*	.024	.119
Need for Support	.319**	.081**	.375**	.064**	.444**	.098*	.059
Informal Support	.367**	.047**	.390**	.015	.450*	.006	.019
Formal Support	.419**	.052**	.428**	.038*	.504**	.054	.124
Child Age	.430**	.011	.428**	.000	.594**	.090**	10.370**
Child IQ	.438**	.008	.434**	.006	.599**	.006	.024

*p<.05, **p<.01

TABLE 19

Mean Scores and Standard Deviations (SD)
for Alberta and North Carolina Samples

	Alberta (N-90)		North Carolina (N=58)		
Independent Variable	Mean	SD	Mean	SD	t
Respondent Age	31.00	6.12	29.56	7.88	1.24
SES	35.67	14.60	32.96	14.87	1.06
Monthly Family Income	1895.58	604.18	1386.70	700.13	4.45**
Locus of Control	24.43	4.96	25.26	5.25	-0.97
Number of Dependents	4.02	1.28	3.90	0.91	0.65
Length of Community Residence	12.69	11.64	16.88	13.27	-1.81
Financial Event Occurrence	3.47	2.88	5.31	3.59	-2.98**
Financial Event Rating	9.48	8.67	15.54	14.65	-2.83**
Child Age	23.68	11.31	30.72	16.72	-3.06**
Child IQ	57.90	26.12	53.91	29.04	0.86

*p<.05, **p<.01

TABLE 20

Frequency of Occurrence
for Alberta and North Carolina Samples

	Alberta (N-90)	North Carolina (N-58)	
Independent Variable	Percent	Percent	X^2
Child Sex (Male)	57.3	60.3	.715
Married	87.6	83.9	.528
Spouse Employment Status	95.9	97.9	.564
Health Insurance	100.0	86.0	.000**
Adequacy of Insurance	92.1	68.3	.008**
Diagnosis (Physical)	12.9	31.0	.008**

*p<.05, **p<.01

TABLE 21

Mean Scores and Standard Deviations (SD) for Alberta Mothers and Fathers Samples on Sources of Informal Support

	Alberta (N-90)		North Carolina (N-58)		
Independent Variable	Mean	SD	Mean	SD	t
Self	4.54	2.26	5.62	2.90	-1.78
Spouse	7.64	1.76	7.62	3.49	0.04
Children	1.83	2.25	2.05	2.42	-0.40
Parents	2.97	2.33	2.78	2.68	0.32
Spouse's Parents	2.21	2.35	1.48	2.23	1.37
Siblings	2.27	2.34	1.78	1.95	0.97
Spouse's Siblings	1.40	2.11	1.08	1.63	0.74
Relatives	1.05	1.59	1.02	1.67	0.07
Friends	3.56	1.69	3.32	2.86	0.44
Neighbors	0.78	1.37	0.70	1.26	0.26
Church	0.78	1.43	1.32	2.49	-1.14
Co-workers	0.40	0.83	1.18	1.72	-2.48**

*p<.-05, **p<.01

TABLE 22

Mean Scores and Standard Deviations (SD) for Alberta Mothers and Fathers Samples on Sources of Formal Support

	Alberta (N-90)		North Carolina (N-58)		
Independent Variable	Mean	SD	Mean	SD	t
Child Care	1.43	1.75	1.51	1.74	-0.20
Therapist	0.32	0.85	0.40	1.32	-0.31
Doctors	1.75	1.67	1.08	1.38	1.89
Early Intervention	4.10	1.86	2.05	1.68	4.97**
Health Unit	0.86	1.22	0.81	1.39	0.18
Handicapped Children's Services	0.56	0.83	0.70	1.10	-0.59
Other Agencies	0.89	1.64	0.91	1.80	-0.07

*p<.-05, **p<.01

TABLE 23

Mean Scores and Standard Deviations (SD) for Alberta Mothers and Fathers Samples on Types of Support

	Alberta (N-90)		North Carolina (N-58)		
Independent Variable	Mean	SD	Mean	SD	t
Help/talk with	4.67	2.23	3.72	2.92	1.56
Encourage	3.51	2.51	3.45	2.43	0.09
Have fun with	3.40	2.07	3.64	2.01	-0.51
Answer questions	3.32	1.81	2.78	1.81	1.28
Advocacy	1.59	0.86	1.59	1.09	0.00
Information	2.37	1.40	2.59	1.68	-0.61
Loans money	1.35	1.11	1.32	1.24	0.10
Housekeeping/ maintenance	1.78	0.82	1.94	1.20	-0.68
Transportation	1.91	1.01	1.91	1.36	0.00
Child care	3.16	1.60	3.10	1.52	0.15
Time with child	4.21	2.28	4.29	2.77	-0.14
Acceptance of child	8.70	3.82	7.13	4.63	1.59

*p<.-05, **p<.01

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APPENDIX A

Letter and Parent Consent Form

Appendix A has been removed

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APPENDIX B

Questionnaires

Appendix B has been omitted

because of unavailability of copyright permission.

Background Information

Perception of Control Scale
by Carol M. Trivette & Carl J. Dunst

Financial Impact Survey
by M. Holdgrafer, C. M. Trivette & C. J. Dunst

Support Functions Scale (Short Form)
by Carl J. Dunst & Carol M. Trivette

Inventory of Social Support Canadian Version
by Carol K. Trivette, Carl J. Dunst & M. Holdgrafer.

Personal Time Commitment Scale
by Carl J. Dunst & Carol M. Trivette

Personal Well-Being Index
by Carol K. Trivette & Carl J. Dunst

Family Inventory of Resources and Management
by H. I. McCubbin, J. K. Coseau & J. A. Harkins